

Steering of the Stark Echo Temporal Response

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Abstract

© 2016, Springer Science+Business Media New York. We investigate the effect of external spatially inhomogeneous electric fields on correlations between isochromates of an inhomogeneously broadened spectral line. We use laser excitation at various time intervals between an object laser pulse and its Stark echo response. Also we study the reproducibility of information contained in the Stark echo response and the possibility of steering its temporal form.

<http://dx.doi.org/10.1007/s10946-016-9559-7>

Keywords

coefficient of inhomogeneous broadening, Stark (gradient) echo, temporal form of object laser pulse